### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010232 Address: 333 Burma Road **Date Inspected:** 21-Nov-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1600 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

## **OBG** Assembly Yard

SMAW repair welding on weld joint 004 located at CA102 edge to deck cross beam side of segment. Welder is identified as Mr. Hu Yacheng (049379). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #907.

Y Locations of excavations by above noted welder (049379) are located at approximately 1260~ 1300.

SMAW repair welding on weld joint 004 located at CA102 edge to deck cross beam side of segment. Welder is identified as Mr. Wu Haijun (201087). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #907.

Y Locations of excavations by above noted welder (044779) are located at approximately 310~485mm.

# WELDING INSPECTION REPORT

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### NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations and MT indications are as followed:

1AAW+1AW

1. Deck plate weld joint OBE1-004 excavation areas located at y locations 3545mm (1 transverse indication), 3845mm (1 transverse indication and porosity) and 3730mm.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

UT reject excavation was performed at deck plate to deck plate weld joint 1AAE+1AE on segment 1E.

1. Y location 3545mm, 3880mm, 3730mm, 10410mm, 11730mm, 11118mm.

During random in-process visual inspection, this QA Inspector observed ZPMC personnel performing UT reject excavation on the side to bottom plate weld splice SEG004A-007(bike path side), per ABF UT report UT-1E-618R1. This QA Inspector noted ZPMC personnel gouged into base material (side plate) approximately 24mm in depth and 50mm out of weld joint being excavated. This QA Inspector issued an incident report on the above noted issue.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer